



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/531,254

11/04/2005

Gian Luigi Bosio

07040.0219

4721

22852

7590

06/26/2008

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP

901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

KNABLE, GEOFFREY L

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

06/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/531,254	Applicant(s) BOSIO ET AL.	
	Examiner Geoffrey L. Knable	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-49 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 25-49 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/13/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

1. Claims 28-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 28, the difference between the two alternative steps (separated by "or") is somewhat confusing. In particular, it is not clear what the second alternative is trying to describe (at least to the extent that it is to be read as distinct from the first alternative). Note especially that if this is indicating that a single separating element can raise plural "flaps", this would also lack clear antecedent in the original disclosure (no such new matter rejection has however been made as it is not clear that this is the intent - reconsideration will however be required depending upon applicant's response)

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 25, 27, 37 and 38 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 02-137918 to Bridgestone.

JP '918 discloses a method of manufacturing a tyre for a vehicle wheel, comprising: making a carcass structure on apparently a first-stage drum (e.g. note drum "6" is described as a "first fabrication drum" at for example page 6 of the machine translation); transferring the carcass structure to a second-stage drum, toroidal shaping and applying a belt and tread structure to the carcass structure at a radially external position of the carcass/belt structure (e.g. note reference to "2nd fabrication" including joining with belt and tread and "toroidal modification" in paragraph above the "Effect of the Invention" on page 5 of the machine translation); wherein the tyre comprises a carcass structure comprising: at least one carcass ply (1, 2); and a pair of annular reinforcing structures (7/8); wherein the at least one carcass ply is operatively associated with the annular reinforcing structures, wherein the annular reinforcing structures are suitable for mounting the tyre on a corresponding rim, wherein each annular reinforcing structure comprises: at least one bead core (7, 7'); and an annular element (8, 8'); and wherein making the carcass structure comprises: feeding at least one semi-finished product onto the first-stage drum (e.g. 1a/1b in fig. 2(a) can be

Art Unit: 1791

termed a semifinished product); disposing at least one separating element (e.g. 3") radially external to the at least one semi-finished product; feeding at least one carcass ply (e.g. 1a', 1b') onto the first-stage drum at a radially external position with respect to the at least one separating element (note fig. 2a); disposing the annular elements (8') radially external to the at least one carcass ply and turning up the at least one carcass ply around at least one of the annular elements (e.g. fig. 2g); removing the at least one separating element (note all the various separating elements (including 3") are removed - the claims express no particular requirement with respect to the order of steps); and applying the bead cores (7' - note that the claim is entirely consistent with the bead core and filler both being turned-up around). A process as claimed in claim 25 is therefore anticipated by this disclosure. It is noted however that it is arguably not entirely clear of the reference is clearly disclosing two stage building. Even if not considered to be disclosed, however, two stage building (including toroidal shaping and joining with the belt and tread at the second stage) is an extremely well known, conventional and obvious building technique for building radial tires.

As to claim 27, note e.g. the abstract indicates that the layers are "stitched" and thus consolidated under pressure as claimed. As to claims 37 and 38, filler 8' reads on the annular element and is tapered and comprises an elastomer.

6. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 02-137918 to Bridgestone.

As to claim 26, JP '918 discloses various separating elements (sheets 3/3'/3"/4) but it is not clear how they are applied. To either wind the sheets or axially apply

preformed annular/cylindrical separating sheets, consistent with the claim, are considered to have been two obvious alternatives to yield the desired fig. 2a configuration as the final desired configuration of the separating sheets is clearly cylindrical.

7. Claims 39-43, 45, 48 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Lacagnina (US 5,851,329).

As to claim 39, Lacagnina discloses a drum for manufacturing a tyre for a vehicle wheel, comprising: a central portion (e.g. 12); two side portions (e.g. col. 6, lines 35-36; unillustrated folding means that would read on side portions are also contemplated - e.g. col. 7, lines 46-57); at least one transport device for bead cores (col. 7, lines 49-53); at least one pressure device adapted to consolidate different semi-finished products with each other (e.g. fig. 5; col. 8, lines 60-64); a device adapted to radially modify a surface of the drum (note that the drum surface is radially expandable - col. 6, lines 25-28); and at least one turning-up device comprising at least one tubular separating element (17, 18), wherein the at least one separating element is open at least at one end (e.g. col. 6, lines 50-54), wherein the at least one separating element is externally associated with the first-stage drum (note the figures). Claim 39 also specifies particulars of the tire to be built but these represent the intended use of the apparatus and do not further structurally define the drum in a manner that would define over Lacagnina. Lacagnina thus anticipates claim 39.

As to claim 40, note again the pressure roller in fig. 5 (also col. 8, lines 60-64). As to claims 41-42, the turning up devices 17-20 are positioned at each end of the drum

Art Unit: 1791

and are axially movable and rotatable - e.g. col. 6, lines 41-46. As to claim 43, note col. 6, lines 50-54 and col. 8, lines 5+. As to claim 45, note for example clamp means described at col. 8, lines 55-59 that are associated with the turning devices (insofar as they help hold the sidewall when located partially on the tubular element, they are operatively associated with these elements). As to claim 48, the fig. 4 illustrated roller can be termed the second pressure device, in which case other elements such as the turn down device (col. 7, lines 46-49) or clamp means (col. 8, lines 55-59) read on the claimed the other pressure device. As to claim 49, the separating elements are made from anti-adhesive, elastic material - note col. 6, lines 64-66.

8. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lacagnina (US 5,851,329).

Lacagnina indicates that the tubular elements include reinforcing threads although it does not appear to suggest circumferentially disposed threads (reading this as requiring that the threads extend in the circumferential direction). It does however indicate that suitable reinforcing can be selected as long as the desired extensibilities are provided, i.e. circumferential extensibility and relatively inextensible in the axial direction - note esp. col. 6, line 964 - col. 7, line 34. To include circumferential reinforcement, either as relatively extensible elastic threads, or as circumferential threads adjacent the flanges where circumferential extensibility would be seen by the artisan as not needed, would therefor have been seen as obvious reinforcement configurations and lead to only the expected results.

Art Unit: 1791

9. Claims 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lacagnina (US 5,851,329) as applied above, and further in view of Okafuji et al. (US 4,830,693).

As to claims 45-47, providing a bladder based device as the folding apparatus described at col. 7, lines 46-57 would have been obvious as such represents an extremely well known folding device in this art - Okafuji et al. is merely exemplary. The bladder is of larger diameter than the drum and is expandable and pressed towards the drum surface. Claim 45 has been included within this rejection as such a folding device would also form a second pressure device.

10. Claims 28-36 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The closest prior art would not teach or render obvious a process as defined in claim 25 with the additional requirements of claim 28 where axial movement of the separating elements lifts respective flaps of the carcass causing the flap to be wrapped around the annular element. While Lacagnina shows effecting lifting up a flap with axial movement of the separating device, this lifting is for a sidewall flap and does not otherwise suggest a method as claimed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey L. Knable/
Primary Examiner, Art Unit 1791

G. Knable
June 20, 2008